GENERAL TAYLOR NEVER SURRENDERS

URBAN ARCHAEOLOGY AND THE DANGERS OF AHISTORICAL INFERENCING

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Since the 1960's, some archaeologists working with historic period sites have become increasingly enamored of the idea that the archaeological record represents a separate data set which can and should be interpreted independent of the historical record, a process which I refer to as ahistorical inferencing. This attitude is, in part, a reaction against an earlier view of archaeology which saw our discipline as the "handmaiden" of history and restoration architecture: useful, but neither significant nor necessary. The approach has led to the development and extensive use of a number of quantitative methods for analyzing archaeological collections which have proved to be remarkably useful in dating sites (South 1977), determining the function of occupations (South 1977), and interpreting the socio-economic status of occupants (Miller 1980) when appropriately applied. Several of these quantitative methods (most notably Miller's system for determining the relative initial cost of ceramic assemblages) are, in fact, based on extensive historical research, and can be immensely useful when appropriately applied. However, when these quantitative methods are applied to urban workingclass sites without balancing the resulting interpretations against the relevant documentary sources, workingclass consumer behavior, or site formation processes, the result is ahistorical inferencing, and significant errors can be introduced.

The problems involved in what I am calling ahistorical inferencing are readily apparent when comparing the assemblages from two privies from adjoining properties on Lafayette Street, a one-block alley on the western edge of Wilmington's urban core. The residences along the south side of Lafayette Street appear to have been constructed after about 1845, based on changes in land values in sucessive sales, and to have been occupied by workingclass households until the structures were demolished during the urban renewal of the early 1960's.

These two privies were associated with the properties at 406 and 404 Lafayette Street. They were excavated in 1979 by Mid-Atlantic Archaeological Research, Inc. as part of a location/identification study for the Delaware Department of Transportation, conducted in advance of final construction plans for Wilmington Boulevard (Thomas, Regensburg, and Basilik 1980).

Feature 6 was a single-barrel privy associated with 406 Lafayette Street, which had been looted by bottle collectors and then refilled prior the archaeological investigation. Feature 5, associated with 404 Lafayette Street, was a four barrel privy. This privy had only been partially disturbed by bottle collectors, and four intact deposits were identified.

If we rely on ahistorical inferencing techniques to interpret these two features, ignoring or discounting for the time being contradictory evidence that cannot be dealt with using quantitative techniques, we come up with the following picture. The deposits in both features were clearly the result of domestic occupations, because the proportional distribution of functional categories of artifacts is consistent with patterns defined by South (1977) for such occupations. These privies must have been filled shortly after the construction of the houses which they served, because the ceramic assemblage from Feature 6 produces a mean ceramic date of 1848.57, and that from Feature 5 a mean date of 1859.86. The ceramic assemblage from Feature 5 is too small to use in calculating ceramic values, but Feature 6 had a mean ceramic index of 1.83, which indicates that the household which produced the assemblage was of moderate income. This analysis could, of course, be developed in greater detail by examining relationships between specific artifact groups. However, this brief summary will serve as a starting point for discussion.

A closer examination of both the archaeological contexts and the assemblages themselves indicates a number of inconsistencies which are not easily dealt with using quantitative techniques. To begin with, the archaeological evidence makes it clear that these two privies were filled at about the same time, probably within the same year. In the undisturbed levels of Feature 5, there were sherds which crossmended with 48 ceramic vessels recovered from Feature 6. These crossmends could not have occurred as a result of looting, because the sherds were recovered from the levels of Feature 5 which had not been affected by the bottle collectors.

It is also unlikely that the crossmending sherds had been kicked around on the surface for any length of time before being deposited in Feature 5. Observations made over several winter visits to a deflating site along the coast indicate that Delaware's winters are severe enough that any ceramic sherds at or close to the surface over even a single winter would spall, splinter, or loose glaze. Frost damage is not apparent on any of the crossmending sherds. On the basis of strictly stratigraphic evidence, therefore, these two features are coeval, despite the 11-year difference suggested by the mean ceramic date.

Although a mid-nineteenth century date for Feature 6 is supported by ceramic marks, like this "Carrara" pattern plate date-marked Nov. 4, 1852, as well as by a number of other artifact groups, including the bases of two burning fluid lamps and a nearly complete burning fluid hand lamp which were probably made during the 1850's, and the fragments of at least four whiskey

flasks bearing the images of George Washington and General Zachary Taylor, other evidence suggests a much later date. Feature 5, which we have demonstrated must be coeval with Feature 6 strictly on the basis of archaeological evidence, contained a number of artifacts which could not have been deposited until after about 1890, including patterns of pressed glass which were first manufactured after that date. This decal decorated plate and cup were also probably not available until the end of the nineteenth century (Wegers and Carley 1982:7). Several pharmaceutical bottles are marked with the names of firms which were in operation during the last decade of the nineteenth century or the first decade of the twentieth century. Finally, and most conclusively, one bottle recovered from this feature is marked "Wilmington Brewing Company", which was in operation from 1903 to 1913.

We could, of course, assume that the deposit was made over a long period of time, and that the Wilmington Brewing Company bottle simply represented the end of that period. However, calculations based on figures for human waste accumulation in privies in a standard work on sanitation engineering indicate that a four-person household could fill a single-barrel privy in less than six months (Ehlers and Steele 1958:35), without the addition of household refuse. Although some allowance must be made for drainage and compaction, it is unlikely that either the fill of Feature 6 or Level 5 of Feature 5 (the only fecal deposit in this privy) required more than a few years to accumulate. We have already demonstrated that sherds from vessels in Feature 6 must have made their way into Feature 5 within the same year that they were deposited in Feature 6. For the same reasons, all the artifact assemblages in all four undisturbed levels of Feature 5 must have been deposited within the same year. Despite the earlier mean ceramic date, then, both Feature 5 and Feature 6 must have been filled and abandoned within or shortly after the period of existence of the Wilmington Brewing Company, that is to say, 1903 to 1913. They could not have been filled prior to that time.

An informal survey among my friends and acquaintances with experience in the use of privies as a permanent method of human waste disposal, both in rural areas of this country and in Third World countries, indicates that the disposal of trash in privies is not characteristic of privy use. It is, rather, a privy-abandonment behavior. A privy is abandoned when it is no longer needed (as when sewers are installed), when the occupant of the property determines that it would be better to have the privy in some other location (usually associated with changes in the structural organization of the property), or when it is filled. In urban areas, privies are generally cleaned when they have been filled, rather than being moved. This is because urban privies (referred to as vault privies or privy-wells) are generally dug to the water table and are more or less water-tight in comparison to rural pit privies. The contents do not, therefore, drain and compost as they do in pit privies, which are generally not lined and which do not extend to the water table (Ehlers and Steele 1958:34). Because the Lafayette Street properties were quite

small, it is unlikely that Features 5 and 6 were abandoned because of structural reorganization. It is more likely that this occurred when the properties were attached to the sewer. In both cases, this occurred in 1911, according to work orders on file with the Wilmington Department of Public Works. This date is entirely consistent with the terminus post quem indicated by the Wilmington Brewing Company bottle.

Now, then, can we explain the inconsistency between this date and the calculated mean ceramic date. I would suggest that there are several factors operating in this situation. First of all, there were no major changes in ceramic technology from the mid-nineteenth century until about 1930, when brightly colored ceramics, such as Homer Laughlin's Fiesta Ware, were introduced (Wegers and Carley 1982:5). Accurate date ranges for the introduction of decorative innovations, such as decalcomania and stamp-decoration have not been established. Currently available mean manufacture dates are, therefore, not adequate to provide accurate dates for late-nineteenth and early-twentieth century occupations.

Furthermore, the artifact assemblage in Feature 5 appears to represent primarily items discarded during daily activities. This feature contained a relatively high frequency of pharmaceutical, condiment, and household chemical containers, which were probably discarded soon after the contents had been used. In addition, cups were more frequent in the assemblage than saucers (Wise 1985:4). Miller (1980:13) has suggested that cups are more likely to break during normal household activities than saucers because they are handled more and are subjected to extremes of temperature. Because this assemblage results from daily discards rather than "housecleaning" activities, there are relatively few ceramic items in the collection, and some of these (like this decal decorated cup and plate) are not reflected in the mean ceramic date calculation. Thus, a mean ceramic date calculated for Feature 5 is likely to be inaccurate both as a result of small sample size and because key types are not included in the calculation.

Finally, the assemblage from Feature 6 appears to represent the wholesale discard of a large number of outdated, outmoded, and no longer needed items. An extraordinarily large number of glass and ceramic vessels were discarded in a relatively short period of time. The assemblage contains an equal number of cups and saucers, suggesting deliberate discard, rather than accidental breakage. Furthermore, the Feature 6 assemblage contains a relatively low frequency of pharmaceutical, condiment, and household chemical bottles (Wise 1985:5). The 50 to 60 year gap between the initial purchase of many of these items and their final deposition in Feature 6 suggests that the occupants of 406 Lafayette Street were relying on second-hand dishes and lighting fixtures. The ironstone tablewares from Feature 5 may also represent the use of second-hand ceramics for everyday use, but most other items are consistent with a turn of the century occupation date.

It should be clear that any attempt to determine socio-economic status using quantitative analyses of ceramics 50 or 60 years after their original purchase is unlikely to provide useful information. However, the fact that the household inventory included a large number of second-hand items is of significance in understanding the socio-economic position of the household which produced the assemblage. Modern material culture studies conducted at the University of Arizona (Schiffer et al. 1981) suggest that households which are most likely to rely on second-hand items will be young, poor, and/or move frequently. All of the heads of household listed in city directories for 406 Lafayette Street from 1890 to 1920, the period for which I have conducted the most intensive documentary research, have been described as laborers. Few lived at this address for more than a few years, and at least one household was clearly newly formed. This contrasts with the occupation history of 404 Lafayette, which was continuously occupied by the same household for more than 30 years, a contrast which is also reflected in the artifact assemblage from Feature 5. Thus the failure of the mean ceramic date to accurately reflect the date at which these deposits were made is, in fact, a reflection of social and economic processes which are of importance in interpreting the archaeological record. These processes cannot, however, be inferred directly from the archaeological assemblage without reference to the context of the assemblage, to other assemblages, or to the documentary record.

In view of this discussion, I suggest that it would be unwise to dismiss the analytical potential of deposits that produce mean ceramic dates which are inconsistent with other items in the assemblage or with their archaeological context or to accept without reservation the quantitative temporal and socio-economic placement of deposits recovered from urban working class neighborhoods without closely considering in detail the archaeological context of the deposit, the total artifact assemblage, the nature of structural reorganizations within the property, and a wide range of documentary information. Researchers looking for sources of information on early-twentieth century workingclass assemblages may find it desirable to re-evaluate the relevance of deposits which have been subjected to ahistorical analysis. I would, at this point, like to suggest that two features excavated from properties less than two blocks from 404 and 406 Lafayette Street should be considered for such re-analysis.

These two features are associated with 101 and 103 West Street, and were excavated in 1981 as part of an archaeological mitigation project conducted prior to the construction of Wilmington Boulevard (Soil Systems, Inc 1984). Like the Lafayette Street properties discussed above, these lots contained small two-storey frame residences constructed just before the Civil War as speculative housing for workingclass households. Both features originated in or at the base of the most recent occupation deposit. (This block is located on a slope, and up to two and a

half feet of fill had been added above the original topsoil). As described in the field notes, this occupation deposit consisted of a grey loam heavily mixed with coal ash, and with demolition rubble concentrated at the top. The lower levels of this deposit, which occurred over the entire area excavated, contained several coins dating between 1900 and 1920.

Feature 1, associated with 103 West Street, was a single barrel privy filled with coal ash, rubble, clay, and artifacts. A mean ceramic date of 1860.79 was calculated based on the ceramics recovered, although two coins dated 1900 and 1913 were also recovered. The original researchers assumed that these coins had been introduced as a result of disturbance from a pipe trench and a backhoe trench (Soil Systems, Inc. 1984:160) despite the fact that these dates are consistent with glass embossment dates from the same feature (Soil Systems, Inc. 1984:174). Because an analysis of vessel completeness indicated that this feature contained displaced refuse, the assemblage was not considered in other analyses, and virtually no information on the assemblage is available in the final report.

Feature 2 was associated with 101 West Street, and consisted of a single-barrel privy two and a half feet deep. The bottom one and half feet of the privy was filled with fecal material and artifacts, while the upper level was clay fill and artifacts. The assemblage as a whole is remarkably similar to that from the privy at 406 Lafayette Street. Both assemblages include similar oil lamp bases, the same "D. McCullin" and "J. Bryant" bottles, nearly identical stamp decorated cups, and similar hand painted polychrome cups.

Mean ceramic dates were calculated for each arbitrary six-inch level in the fecal deposit, despite the fact that this deposit must have taken less than a year to accumulate. These dates ranged from 1851.88 to 1860.33 (Soil Systems, Inc 1984:174). However, these dates, like that for Feature 1, are very close to the date when the associated residence was constructed. It seems unlikely, in view of my previous discussion, that privies on these properties would have been abandoned so soon after the beginning of occupation. Furthermore, it seems unlikely that so small a residential property (approximately 14 to 17 feet wide) would have undergone significant reorganization. Perhaps the assemblages from Features 1 and 2, like that from Feature 6, represent the discards of mobile, low income, and possibly young households, deposited shortly after these properties were connected to the sewer.

Work orders on file with the City of Wilmington Sewer and Water Department indicate that both these properties were connected to the sewer in 1907, shortly after they were purchased by Daniel Bubenzer, who lived on Front Street, a few blocks away. This date is consistent with both the coins and the latest glass embossments from Feature 1 (103 West Street). Neither property was occupied for more than two or three years by the same household during the first decade of the twentieth century, which

would be consistent with a second hand ceramic inventory, as I have suggested above, and which would be reflected in a too early mean ceramic date. It is interesting to note that 103 West Street was vacant in 1908 and 1910, immediately following the installation of sewers, which may explain why the privy was filled with coal ash and rubble rather the last deposit of human waste.

This preliminary re-evaluation of the significance of the West Street features is based on a very cursory examination of basic documentary sources, and without re-examining the collections themselves, which are currently located out of state. Nonetheless, it is clear that an approach which takes into consideration a wide range of information, rather than relying exclusively on a narrow range of analytic techniques, is more likely to produce fruitful lines of research, and to accomodate apparently contradictory or inconsistent data. The archaeologist who puts his faith in the quantitative manipulation of an assemblage without constantly testing that manipulation against other sources of information is likely to find himself in a box canyon where General Zachary Taylor and his army of second-hand household goods wait to defeat him in the ambush of ahistorical inferencing. General Taylor never surrenders.

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